# *Review of Southern California Edison's FERC and CPUC Antelope Transmission Project Filings*

**Energy Commission Committee Workshop**

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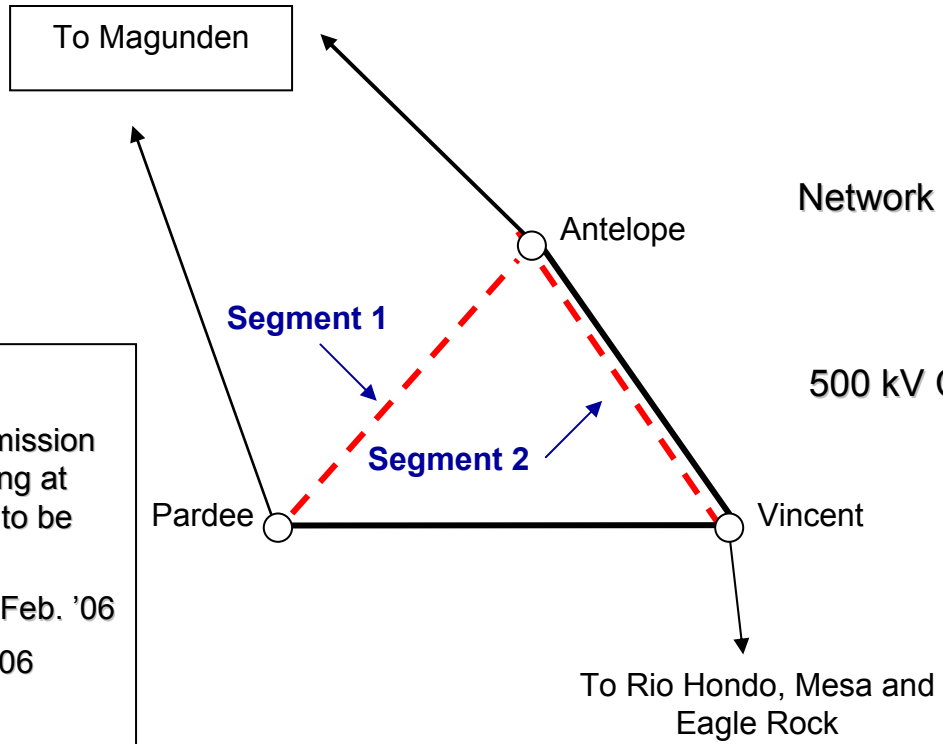
# Antelope Transmission Project Summary

- Proponent:
  - Southern California Edison
- Purpose:
  - Interconnect and integrate CEC forecast development of renewable energy projects totaling 4,000 MW
- Plan:
  - Phased development in three segments:
    - Segment 1: 25.6 miles 500 kV Pardee to Antelope, initially operated at 220 kV
    - Segment 2: 17.8 miles 500 kV Antelope to Vincent, initially operated at 220 kV
    - Segment 3: 26.1 miles 500 kV Antelope to Substation 1, initially operated at 220 kV

      9.4 miles 220 kV Substation 1 (500/220/66 kV) to Substation 2 (220/66 kV)
- Timing:
  - Segment 1 in-service date of December 2006 with subsequent segments in-service date to be determined based on resource development plans.

# Antelope Transmission Project – Segments 1 and 2




Network Facilities – Segments 1 and 2

500 kV Construction

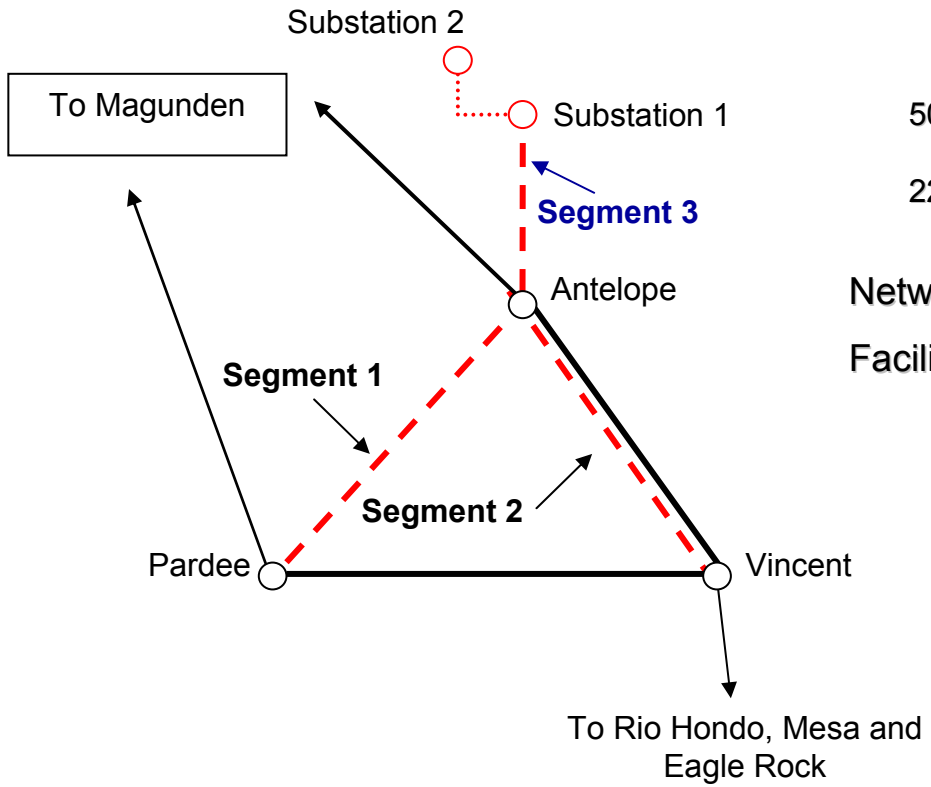
**Segment 1**

- 25.6 miles of transmission line built for operating at 500 kV, but initially to be operated at 220 kV
- CPUC Decision by Feb. '06
- In-service by Dec. '06
- Cost $80 million

**Segment 2**

- 17.8 miles of transmission line built for operating at 500 kV, but initially to be operated at 220 kV
- CPUC Decision by Sept. '06
- In-service date TBD
- Cost $127 million

# Antelope Transmission Project – Segment 3




500 kV Construction

220 kV Construction

Network Facilities – Segments 1 and 2

Facilities Radial of Network - Segment 3

**Segment 3**

- Antelope to Substation 1 line - 26.1 miles of transmission line built for operating at 500 kV, but initially to be operated at 220 kV.
- Substation 1 to Substation 2 line – 9.4 miles of 220 kV transmission line and Substation 1 (500/220/66 kV) and Substation 2 (220/66 kV)
- CPUC Decision by Sept. '06
- In-service date TBD
- Cost $78 million

# Comparison of the SCE's two filings, observations and operational assessment

**Comparison of the Filings:**

- There appeared to be no inconsistencies between the two filings.
- The CPUC filing provided more detailed information regarding the project, which would be consistent with a request for CPCN.

**Observations and Operational Assessment:**

- Anything beyond Segment 1 of this proposed three segment project is still in the conceptual design stage and is subject to being modified and updated, as required, to reflect changing grid conditions, reliability standards, and request for interconnections and transmission service to receiving LSEs.
- Single largest contingency will be the loss of the Antelope-Substation #1 line representing a loss of approximately 700 MW, which is less than the control areas current single worst contingency (loss of a single unit at either Diablo Canyon or San Onofre).

# Comparison of SCE's two filings, observations and operational assessment (cont.)

**Observations and Operational Assessment:**

- Deliverability of new resources to other LSEs may require additional analysis and upgrades.
- Transmission planning and sizing based on forecast resource development in the region is appropriate.

# Summary of SCE's FERC Filing

1. Purpose of Filing - Requests FERC to issue a Declaratory Order that provides assurance about cost recovery and granting the following:
   - Clarify that project trunk-line transmission facilities are eligible to be placed under the CAISO's operational control
   - Rolled-in rate treatment (FERC Transmission Revenue Requirement included in CAISO Transmission Access Charge)
   - Recovery of reasonable project costs even if full increment of forecast generation does not become operational.
   - Full cost recovery rather than FERC's existing abandoned plant policy (recover 50%).
2. Project Need – Facilities required to interconnect and integrate potential alternate energy projects
3. Forecast of Wind Development in the Area – 4,000 MW
4. Capability of Proposed Project (3 Segments) – 700 MW

# Summary of SCE's FERC Filing (cont.)

5. Interconnection Agreements – At this time, SCE does not have any signed interconnection agreements with any developers.
6. Project Justification – Ordering paragraphs of CPUC Decision 04-06-010
7. Project Cost – Not included in filing – addressed in CPUC submittal
8. In Service Dates:
   - Segment 1 – December 2006
   - Segments 2 and 3 – Some future unknown date

# Summary of SCE's CPUC Filing

1. Purpose of Filings – SCE has made two filings related to this project (Segment 1 and Segments 2-3), both conditionally request a CPCN to permit construction.

   Conditions of filing and request of the CPUC:

   - Establish clear cost recovery mechanism and assurance by FERC and the CPUC in advance of construction
   - CPUC to participate in the FERC declaratory order proceedings and advocate project need and full cost recovery
   - Finding from CPUC that FERC's rulings issued at the conclusion of SCE's declaratory order proceeding satisfy the requirement of P.U. Code Section 399.25

2. Forecast of Wind Development in the Area – 4,000 MW

3. Capability of Proposed Project (3 Segments) – 700 MW

# Summary of SCE's CPUC Filing (cont.)

5. Interconnection Agreements – At this time, SCE does not have any signed interconnection agreements with any developers.
6. Project Justification – Ordering paragraphs of CPUC Decision 04-06-010
7. Project Cost:
   - Segment 1 - $80,300,000
   - Segments 2-3 - $127,000,000 and a cost of $204,800,000 if the build out cost of Substation 1 and 2 are included
8. CPUC Decision
   - Segment 1 – February 2006
   - Segments 2 and 3 – September 2006
9. In-Service Dates:
   - Segment 1 – December 2006
   - Segments 2 and 3 – Some future unknown date